HEARING OF THE CENTRAL VALLEY REGIONAL WATER QUALITY CONTROL BOARD

PROPOSED CLEANUP AND ABATEMENT ORDER R5-2009-xxxx FOR THE WIDE AWAKE MERCURY MINE COLUSA COUNTY, CALIFORNIA

AFFIDAVIT OF KARL BURKE

Having been duly sworn, I do state the following:

- 1. I am now, and at all times mentioned have been, a citizen of the United States, over eighteen years of age, competent to make this affidavit, and make this affidavit from my own personal knowledge, judgment, and professional experience, and if called upon to testify in the above matter, can testify to the following facts of my own knowledge.
- 2. I am a Regulatory Affairs Manager/Closure Manager employed by Homestake Mining Company of California, an indirect subsidiary of Barrick Gold Corporation. Since March 2006, I have been assigned by Homestake to manage the mine closure process at the McLaughlin Mine in Napa County, California, which is being carried out under the oversight of the Regional Water Quality Control Board, Central Valley.
- 3. As a mine closure manager, I am familiar with the recordkeeping systems maintained by Homestake for properties on which it carried out exploration and development activities, and with the types of records routinely maintained in those systems. The records maintained would include copies of all leases and deeds, correspondence relating to the implementation of any obligations under the terms of a lease (e.g., lease or royalty payments), correspondence with regulatory agencies, including copies of permits sought and obtained for activities carried out on the property, and reports, memoranda and correspondence on planning and evaluating exploration, development, mining and reclamation activities.
- 4. As part of my responsibilities in the Cache Creek area, I was asked to review company files maintained for exploration and development activities carried out by Homestake within the Sulphur Creek Watershed and specifically with respect to Homestake's activities in Colusa County Assessment Parcels 018-200-010-000, 018-200-011-000, and 018-200-012-000, which include the patented mining claims for the Wide Awake Mercury Mine ("Wide Awake Mine Property"), in Colusa County, California addressed by the Prosecution Team seeking imposition of a Cleanup and Abatement Order ("CAO") in this hearing. The Wide Awake Mine Property for purposes of this hearing is shown on Exhibit A, which was prepared by the Prosecution Team, and Exhibit B, the map from the TetraTech 5C2 Report (2003) ("TetraTech Report") relied upon by the Prosecution Team.
- 5. No documents I reviewed in the Homestake files indicated that Homestake had undertaken any mining activity other than exploratory activities within the Assessment Parcels for the Wide Awake Mine Property. The records described activities related solely to Homestake's preliminary evaluation of exploration potential in areas around the location of the Wide Awake Property, occurring at various times in the period from 1978 to 1993. The

documents described below, accurate copies of which are attached hereto, are all business records maintained in the Homestake files in the regular course of business by Homestake, and all appear to be originals or copies of business records created at or near the time of the events described.

- Homestake has never held a fee interest in the Assessor Parcels for the Wide 6. Awake Mine, and has had no interest of any type in those Assessor Parcels since the surrender of its rights and interests in the Trebilcot Lease in 1993. Exhibit C is a true and accurate copy of a term lease entered into between Homestake and Emma Trebilcot on June 29, 1978, and recorded with the Colusa County Recorder's Office ("Trebilcot Lease"), by which Homestake obtained mining exploration and development rights on several parcels of land owned by Ms. Trebilcot, including portions of Township 14N, Range 5W, Sections 28 and 29 on which the Wide Awake Mine is located. The lease did not provide Homestake with exclusive possession of those properties, including the Wide Awake, and the owner expressly retained the use of the surface for livestock grazing and other agricultural purposes and water development incidental to use uses, and the right to enter into geothermal, oil & gas, and grazing leases with other lessees; other documents included in the Prosecution Team file (e.g., Exhibits D and E) indicate the existence of both geothermal and the oil & gas leases on the Wide Awake Mine Property. Exhibit F is a true and accurate copy of a document from Homestake's records, a copy of which was filed with the Colusa County Recorder's Office, indicating that on May 10, 1993, Homestake surrendered all of its right, title and interest under the Trebilcot Lease as of that date.
- 7. The files I have reviewed contained correspondence and permitting documents to and from Colusa County and the Central Valley Regional Water Quality Control Board indicating those agencies approved all preliminary evaluation work and reclamation by Homestake for its Cherry Hill Project, which included the work on the Wide Awake Mine Property located on T14N, R5W, Sections 28 and 29 in Colusa County. Those documents, which also address work performed on the Central Mine Property, are attached as Exhibits G-J.
- I also reviewed progress reports for the Cherry Hill Project, which described and identified the nature and location of work performed by Homestake on the Wide Awake parcels. The exploratory work carried out by Homestake on the Wide Awake property was largely surface sampling (i.e., collecting surface soil or rock samples, utilizing a rock hammer and chisel). In addition, sampling was done at nine drill holes at seven drilling sites: two site in 1979, four sites in 1987 and one site (three holes) in 1991. The drilling would have involved clearing an area for placement of the drill (an area of approximately 30 by 50 feet for placement of the rotary drill used at sites R- 1& R-2, and 10 by 15 feet for the remaining core holes). Rotary drill holes were approximately 6 inches in diameter and core drill holes approximately 4 inches in diameter. Drilling water, non toxic additives and rock fines were collected in metal tanks and allowed to dry out before being buried and reclaimed on site. Drilling would have taken place over a period of two days or less at each location. Upon completion of the drilling, in compliance with the terms of approvals by Colusa County and the Regional Board, the bore holes were abandoned (procedure attached as Exhibit K). In general the drill hole would be filled with bentonite and plugged with a surface cement cap. The drill casing would be cut off below the reclaimed ground surface level and the pad would be recontoured to blend with the existing topography and reseeded. The Cherry Hill Project files do not identify any road building carried out on the Wide Awake Mine Property.

- 9. The map attached hereto as Exhibit L shows the location of each drilling location for Homestake's work on the Wide Awake Mine Property, and also shows the location of the mine adits and waste rock piles identified by the Prosecution Team as potential sources of mercury to a unnamed tributary leading to Sulphur Creek based on the TetraTech Report (Exhibit B). As that map illustrates, none of the seven Homestake drilling locations is adjacent to a mine adit, identified waste rock or tailings piles or the apparent location of the unnamed tributary identified in the TetraTech report. Only one of the seven drill sites the core drill site at which three holes were drilled in 1991 was within the general area identified as "mined" in the TetraTech report; it was not, however, within or adjacent to the area identified in that report as the source of mercury or sediment to the unnamed tributary to Sulphur Creek, and from my personal observation, was located on a roadway leading to the mined area and did not involve disturbance or cutting into a dump or mined material.
- 10. In August 2009, I personally visited the Wide Awake Mine Property and observed no flow in any potential tributary adjacent to or downgradient from waste rock or tailings on that property to Sulphur Creek. I personally located the seven drill sites and can verify that the sites were recontoured and reclaimed. I also found no indication of groundwater release from the drill holes; i.e., no surface spring flow or coloration. I also observed, as is apparent in the photographs accompanying the Prosecution Team statement of evidence regarding the Wide Awake Mine, that most of the area composing the Wide Awake Mine Property is densely vegetated, which would also indicate limited potential for the discharge of mercury from waste or tailing piles on the Wide Awake Property to Sulphur Creek. The TetraTech Report, Figure 3-5 (Exhibit B) also states that there is little or no erosion apparent at one of the identified waste rock areas. I also note that the Regional Board Staff Reports on the Sulphur Creek TMDL (p. 22) and amendment to the Basin Plan on the beneficial uses of Sulphur Creek indicate that at least during the summer, the only flow in lower Sulphur Creek itself is discharge from naturally-occurring hot springs, at a rate estimated at less than 2 cfs.

I swear and affirm under penalty of perjury under the laws of the State of California that the foregoing is true and correct.

Dated this 16 day of September, 2009 at Lower LAKE, California.

	Karl Burke
State of California County of	Manager of the second of the s
Subscribed and sworn to before	me by Karl Burke this day of September, 2009.
	Notary Public in and for the State of California, residing at
	My appointment expires

CALIFORNIA JURAT WITH AFFIANT STATEMENT

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	Date day of September, 20 or, by
	mKarl Burke
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